

PSEUDOGNAPHALIUM AUSTROTEXANUM (ASTERACEAE:  
GNAPHALIEAE), A NEW SPECIES FROM SOUTHEASTERN  
TEXAS AND ADJACENT MEXICO

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ABSTRACT

***Pseudognaphalium austrotexanum*** Nesom, sp. nov., is described from collections in eleven counties of southern and southeastern Texas and from one locality in Nuevo León, Mexico. The new species is similar to *Pseudognaphalium viscosum*, which occurs in southwestern Texas and widely in Mexico and Central America; *P. austrotexanum* differs in its eglandular stems, non-decurrent leaves, smaller, fewer-flowered heads and keeled, apically rounded, apiculate phyllaries.

RESUMEN

Se describe ***Pseudognaphalium austrotexanum*** Nesom, sp. nov., a partir de recolecciones en once condados del sur y sureste de Texas y de una localidad en Nuevo León, México. La nueva especie es similar a *Pseudognaphalium viscosum*, del suroeste de Texas y muy común en México y América Central; *P. austrotexanum* se diferencia por sus tallos eglandulares, hojas no decurrentes, capítulos más pequeños y con menos flores, y filarios aquillados, apiculados y apicalmente redondeados.

In study of Gnaphalieae of Mexico and adjacent United States, various undescribed taxa and range extensions have come to light. The present paper reports a new species whose geographic range is centered in near-coastal and adjacent inland localities in southeastern Texas, some localities more than 100 airline miles from the coast (Fig. 2). One collection of the new species was made from the outskirts of the city of Monterrey, Nuevo León, Mexico.

***Pseudognaphalium austrotexanum*** Nesom, sp. nov. (**Fig. 1**). TYPE: UNITED STATES. TEXAS. Jim Wells Co.: 10.1 mi S of Alice, railroad right-of-way, Santa Gertrudis Division of King Ranch, open brush on light brownish-gray, clayey, sand loam, 24 Nov 1954, M.C. Johnston 542108 (HOLOTYPE: TEX!; ISOTYPE: SMU!).

*Pseudognaphalio viscoso* (Kunth) A. Anderb. duratione habitu foliis coarctatis linearibus subamplectentibus bicoloribus glandularibusque similis sed caulibus nonglandulosis foliis non-decurrentibus capitulis minoribus floribus paucioribus et phyllariis carinatis ad apicem rotundatis apiculatis differt.

Annual herbs from a woody taproot. Stems 3–7 dm tall, densely and closely white-tomentose-floccose, glabrescent, eglandular, strictly erect, unbranched until near the inflorescence or rarely more highly branched and “a large bushy herb” (fide comments on Runyon 1954). Leaves congested on very short internodes, continuing congested to immediately beneath the heads, the upper loosely to strictly ascending, the lower (moribund) loosely spreading to deflexed, the

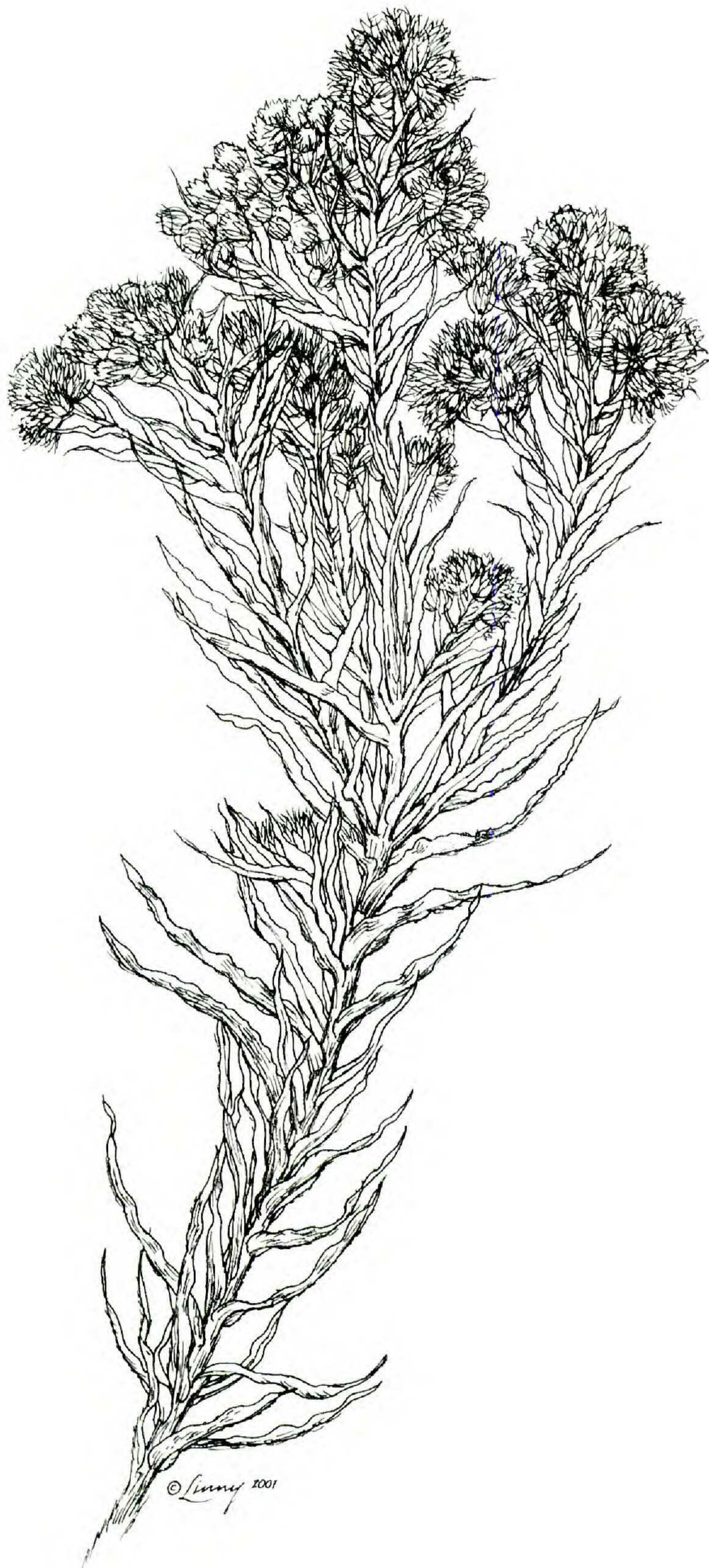


FIG. 1. Habit of *Pseudognaphalium austrotexanum* (from the holotype, *Johnston 542108*).

blades epetiolate, linear to linear-lanceolate, 2–5 cm long, 1–3 mm wide, relatively uniform in size, shorter immediately below the heads, subclasping but not basally ampliate, auriculate, or decurrent, apically acute, strongly bicolored, the upper surface green, densely stipitate-glandular, otherwise glabrate, the lower surface densely and closely white-tomentose, the margins revolute, sometimes closely sinuate. Capitula 4.5–5 mm high, in tight glomerules, the glomerules usually borne in a flat-topped inflorescence 10–30 cm wide, the ultimate branches 1.5–4 cm long; phyllaries narrowly ovate to oblong or elliptic, persistently wooly at the base, the inner with an elongate stereome, gland-dotted near the apex, the outer ca. 2/3 as long as the inner. Outer, pistillate florets (in Mexico, 46–)76–102; inner, bisexual florets (6–)8–11. Cypselae oblong, brownish-yellow, 0.5–0.7 mm long, 4–6 striate-ridged longitudinally, minutely papillate; pappus of fragile, separate, basally caducous barbellate bristles.

Additional collections examined. **MEXICO. Nuevo Leon:** 7 mi SE of the Santa Catarina bridge in Monterrey on the Montemorelos highway, gravel pit of the Cia. Fundidora de Fierro y Acero, 2000 ft, reddish limestone and caliche gravel, 11 Nov 1959, *Johnston 4618* (TEX). **UNITED STATES. Texas. Brazoria Co.:** Brazoria National Wildlife Refuge, Bastrop Bayou, across bayou from N end of island, 27 Oct 1967, *Fleetwood 9149* (TEX); 3.5 mi E of Angleton, 9 Oct 1934, *Cory 11495* (GH). **Brazos Co.:** College Station, 3 Oct 1946, *Parks s.n.* (TEX). **Brooks Co.:** 5 mi N of Falfurrias, 28 Oct 1973, *Everitt s.n.* (SMU). **Frio Co.:** 13.6 mi NNW of Dilly on Hwy 117, scrub pasture, reddish soil, 31 Oct 1981, *Mahler 9225* (BRIT). **Harris Co.:** Seabrook, 18 Oct 1939, *Fisher 39038* (TEX). **Jim Hogg Co.:** 9 mi SW of Hebbronville, sandy loam, not plentiful, 10 Dec 1972, *Bone s.n.* (TEX). **Kenedy Co.:** near Rudolph, S of Norias, sandy knoll along highway, 3 Jan 1963, *Correll 26926* (NCU, TEX); 4.4 mi S of Armstrong, sandy sacahuiste prairie at edge of caliche flat, 29 Nov 1954, *Johnston 542266* (TEX); S of Armstrong on side of Hwy 96, sandy loam soil, scarce, only a few plants seen, 17 Oct 1938, *Runyon 1954* (TEX-2 sheets, US); Norias, highway right-of-way, dune sand, 4 Dec 1948, *Tharp, Johnson, and Webster 48-108* (TEX). **Matagorda Co.:** Matagorda, 14 Oct 1936, *Fisher 3661* (ARIZ, TEX, US). **San Patricio Co.:** 8 mi SW of Taft, near shore of Nueces Bay but above high tide level, soil not saline, 10 Nov 1956, *Jones 1261* (SMU); ca. 2 mi SE of Odem, in sandy open pasture, locally abundant, 31 Oct 1959, *Jones 3610* (TEX). **Uvalde Co.:** Uvalde, 1880, *Palmer 550* (GH).

These plants are similar to *Pseudognaphalium viscosum* (Kunth) A. Anderb. in general appearance and previously have been identified as that species. Plants of both species are taprooted annuals with white-tomentose, strictly erect stems mostly unbranched until the inflorescence, leaves linear to linear-lanceolate, strongly bicolored (green and glandular above, white-tomentose beneath), loosely to strictly ascending, crowded on short internodes and continuing to immediately below the heads, and basally subclasping but not strongly auriculate, phyllaries silvery, thin-hyaline, and achenes minutely papillate. They are distinguished by the following contrasts:

1. Capitula ca. 250-flowered, bisexual florets (13–)16–29, pistillate florets ca. 200–250; inner phyllaries narrowly acute at apex, not apiculate, not keeled or with a barely perceptible thickening along the midrib; stems stipitate-glandular; leaves not basally ampliate or subclasping, the lower usually decurrent 3–6(–10) mm.

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***Pseudognaphalium viscosum***

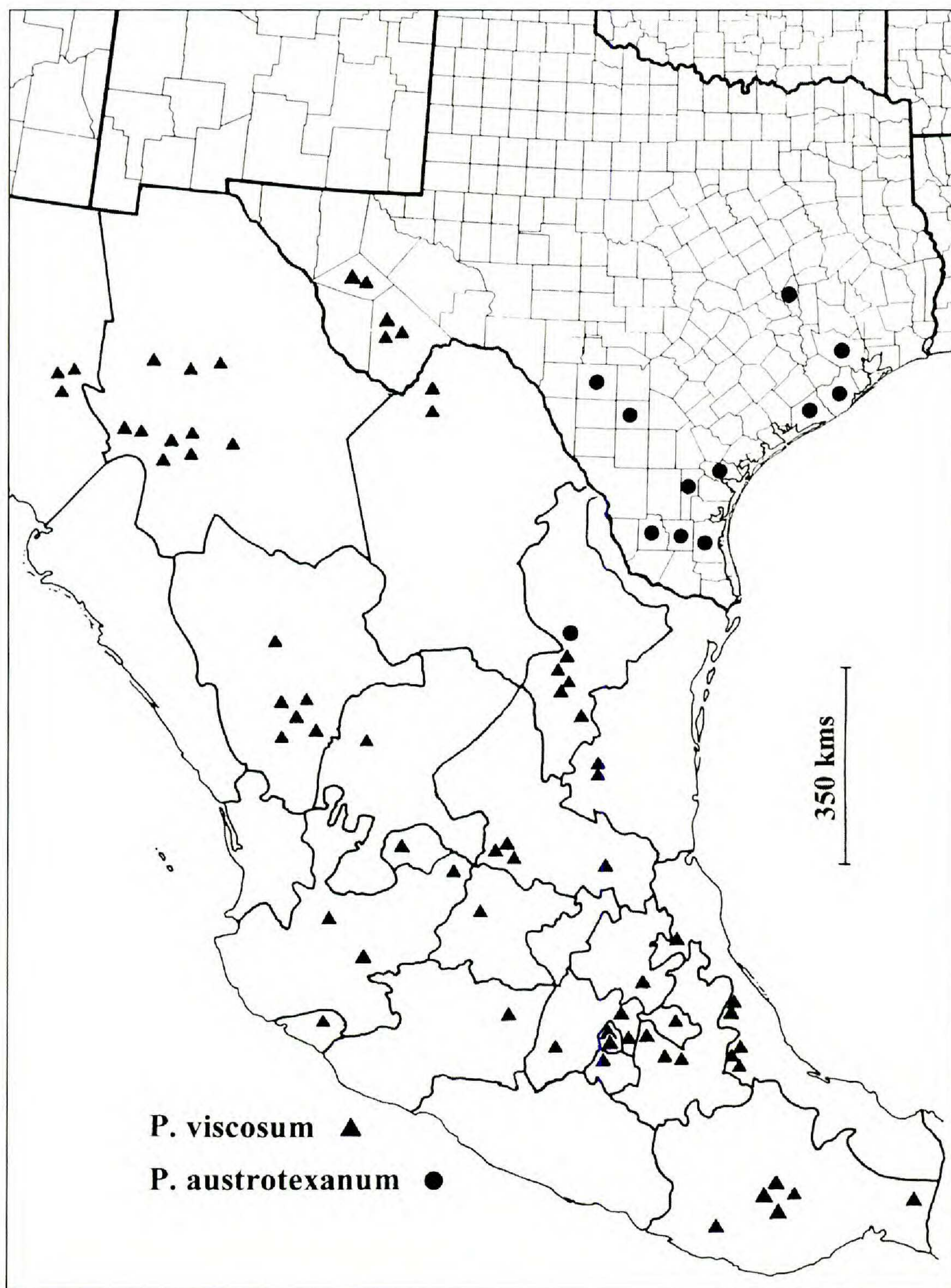


FIG. 2. Distribution of *Pseudognaphalium austrotexanum* and *Pseudognaphalium viscosum* in the United States and Mexico. The range of *P. viscosum* continues into Central America.

1. Capitula ca. 100-flowered, bisexual florets (6–)8–11, pistillate florets (46–)76–102; inner phyllaries apically rounded or acuminate, distinctly apiculate from a thickened and slightly raised midrib (keel); stems eglandular; leaves basally subclasping, not decurrent.

***Pseudognaphalium austrotexanum***

*Pseudognaphalium viscosum* is distributed through Mexico and Central America and also apparently is common on the Caribbean island of Hispaniola. In the United States, it is known only from southwestern Texas, widely separated by distance, habitat, and climate from *P. austrotexanum* (Fig. 2).

Plants of *Pseudognaphalium austrotexanum* were included by Correll and Johnston (1970) as “rare in s.e. Tex.” with plants identified as *Gnaphalium macounii* Greene, a name that has sometimes been misapplied to *Pseudognaphalium viscosum*. The other Texas plants of “*G. macounii*” (“local in Rio Grande Plains and Trans-Pecos ... and the Llano region of the Edward Plateau”) are *Pseudognaphalium viscosum* rather than *Pseudognaphalium (Gnaphalium) macounii* (Greene) Kartesz, which does not occur in Texas. The only known Mexican locality for *P. austrotexanum* is separated by about 200 kilometers from the closest Texas site, although the geology and topology are generally similar. The Nuevo León site is alongside a major highway, and a fruit may have been accidentally transported (vehicle-dispersal) from Texas.

The distinctiveness of *Pseudognaphalium austrotexanum* also has been recognized by several other botanists: Marshall Johnston (by notation); Billie Turner (pers. comm.); and Harvey Ballard (by annotation and pers. comm.).

#### ACKNOWLEDGMENTS

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#### REFERENCE

- CORRELL, D.S. and M.C. JOHNSTON. 1970. Manual of the vascular plants of Texas. Texas Research Foundation, Renner, Texas.